

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/306,111DATE: 05/18/1999  
TIME: 10:07:10

Input Set: I306111.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

1 <110> APPLICANT: Jacobs, Kenneth  
2 McCoy, John M.  
3 LaVallie, Edward R.  
4 Collins-Racie, Lisa A.  
5 Evans, Cheryl  
6 Merberg, David  
7 Treacy, Maurice  
8 Agostino, Michael J.  
9 Steininger II, Robert J.  
10 Bowman, Michael R.  
11 DiBlasio-Smith, Elizabeth  
12 Widom, Angela  
13 Genetics Institute, Inc.  
14 <120> TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM  
15 <130> FILE REFERENCE: GI 6069-74A  
16 <140> CURRENT APPLICATION NUMBER: US/09/306,111  
17 <141> CURRENT FILING DATE: 1999-05-06  
18 <160> NUMBER OF SEQ ID NOS: 180  
19 <170> SOFTWARE: PatentIn Ver. 2.0  
20 <210> SEQ ID NO 1  
21 <211> LENGTH: 571  
22 <212> TYPE: DNA  
23 <213> ORGANISM: Homo sapiens  
24 <400> SEQUENCE: 1  
25 ttcttcgcca ggctctctgc tgactcaagt tcttcagttc acgatcttct agttgcagcg 60  
26 atgagtgcac gagtgagatc aagatccaga ggaagaggag atggtcagga ggctcccgat 120  
27 gtggttgcat tcgtggctcc cggtaatct cagcaagagg aaccaccaac tgacaatcag 180  
28 gatattgaac ctggacaaga gagagaagga acacccctccga tcgaagaacg taaagttagaa 240  
29 ggtgattgcc agggaaatggaa tctggaaaag actcggagtg agcgtggaga tggctctgat 300  
30 gtaaaaagaga agactccacc taatcctaag catgctaaga ctaaaagaagc aggagatggg 360  
31 cagccataag ttaaaaagaa gacaagctga agctacacac atggctgatg tcacattgaa 420  
32 aatgtgactg aaaatttgaa aattctctca ataaagttt agtttctct gaaaaaaaaa 480  
33 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540  
34 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 571  
35 <210> SEQ ID NO 2  
36 <211> LENGTH: 102  
37 <212> TYPE: PRT  
38 <213> ORGANISM: Homo sapiens  
39 <400> SEQUENCE: 2  
40 Met Ser Ala Arg Val Arg Ser Arg Ser Arg Gly Arg Gly Asp Gly Gln  
41 1 5 10 15  
42 Glu Ala Pro Asp Val Val Ala Phe Val Ala Pro Gly Glu Ser Gln Gln  
43 20 25 30  
44 Glu Glu Pro Pro Thr Asp Asn Gln Asp Ile Glu Pro Gly Gln Glu Arg

ENTERED

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/306,111DATE: 05/18/1999  
TIME: 10:07:10

Input Set: I306111.RAW

45 35 40 45  
46 Glu Gly Thr Pro Pro Ile Glu Glu Arg Lys Val Glu Gly Asp Cys Gln  
47 50 55 60  
48 Glu Met Asp Leu Glu Lys Thr Arg Ser Glu Arg Gly Asp Gly Ser Asp  
49 65 70 75 80  
50 Val Lys Glu Lys Thr Pro Pro Asn Pro Lys His Ala Lys Thr Lys Glu  
51 85 90 95  
52 Ala Gly Asp Gly Gln Pro  
53 100  
54 <210> SEQ ID NO 3  
55 <211> LENGTH: 2709  
56 <212> TYPE: DNA  
57 <213> ORGANISM: Homo sapiens  
58 <400> SEQUENCE: 3  
59 gagggaaacct ctcgctgggg ctaggagttc ggccggggcgcc ggcggggcgct 60  
60 ggcagggtcg aagcgtctgc acctggcggg cgatggcgcc cgatgcccggc gccccgggat 120  
61 agcgtggcg aggctgcggg gccccggcgcc gcacgcccggc acctctcccc agccctggcg 180  
62 tgggcccagg cccggccagg cagcaatggg gttcctgcag ctgctggcg tagcgggtct 240  
63 ggcatccgaa caccgggtgg ctggtcgcgc cgaggtcttc gggaaattcca gcgagggtct 300  
64 tattgaattt tctgtgggaa aatttagata cttcgagctc aataggccct ttccagagga 360  
65 agctattttg catgatattt caagcaatgt gactttctt atttccaaa tacactcaca 420  
66 gtatcagaat acaactgttt cttttctcc gactctcctt tccaaattccctt cggaaacagg 480  
67 cactgccagt ggactgggtt tcatccttag accagagcag agtacatgca cttgggtactt 540  
68 ggggacttca ggcatacagc ctgtccagaa tatggctatc ctactctccctt actcagaaag 600  
69 agatcctgtc cctggaggct gtaatttggat gttcgattt gatattgtatccaaacattta 660  
70 cttggagttat aatttttttggaa aacgactat caagtttgc ccagccaaacc taggctatgc 720  
71 gagaggcgta gatccccac catgtacgc tgggacagac caggactcca ggtggagggtt 780  
72 gcagttatgtat gtctatcgtt attttgc tggaaatgac ctactgttggg agatgttgc 840  
73 gaagcatctg cagaggatgg tcagtgtgcc ccaggtgaag gccagtgctc tcaagggtgtt 900  
74 taccctaaca gctaattgata agacaagtgt ttcccttccttccctccgg gacaagggtgtt 960  
75 catatacaat gtcattgttt gggaccctt tctaaataca tctgtgcctt acattcctgc 1020  
76 tcacacatac gcttgcagct ttgaggcagg agagggtgtt gttgcatttttccctt taggaagagt 1080  
77 gtcttccaaa gtgttcttca ctcttttgc cctgcttgggtt ttcttcattt gtttcttgg 1140  
78 acacagattt tggaaaacag aatttttctt cataggctttt atcatcatgg gatttttctt 1200  
79 ttatatactt attacaagac tgacacccat caagttatgtatgtt gtttttttttgc 1260  
80 tgcacttgcgaa agcgtcggtt gaaatgttctt ggttagctgtt tgggtggcgat ttggaaatctt 1320  
81 ctgcgtatctgc atgtctgtt ttggacttagt gctgggggttc ctcatctcgat cagtgtactttt 1380  
82 ctttactcca ctgggaaacc taaagattttt tcatgtatgtt ggtgtattctt gggctactttt 1440  
83 ctcttgcata gctatccctca ttccagttatgtt tttcatgggc tgcctaaagaa tactgaacat 1500  
84 actgacttgcgat ggagtcttgc gtccttatttgc ggtgggttttgc gccattgaca gttactggc 1560  
85 cacaaggctt tccttacatca ctttgcacgtt actcaagaga ggcgtcaaca aggatttcca 1620  
86 cagagcttc acaaatgttgc cttttcaaaatca taatgtactt attatcctgg cagttgggg 1680  
87 catgtggctt gtaagtggaa ttacgttaca gattcgaaga gagagaggac gaccgttctt 1740  
88 ccctcccccac ccatacaatgttgc tatggaaagca agagagagag cggccgttgc caaacattctt 1800  
89 ggacccttgc taccacatttcccttgcatttgc gggcttgc gggcttgc gggcttgc 1860  
90 taaagggttgc ttccagaagg agcagccagg tggagagaga acgccttgc ttctgtatgtt 1920  
91 gcccaggggc ttggcttgc tgccttgc gggcttgc tggagttca tgcctggagt gttcaacag 1980  
92 tctctgggtgc aagtcttata agagatcagg catatataatc tggatgttgc ataatattat 2040  
93 ggtgccctta ttgtatataatg gtaagggtgtt actagggttgc taggtatgtt gtaagagaat 2100  
94 gagaagatg accaaaaggtt tgggtggtagg gggcttttgc tttttccca aataacttgc 2160

PAGE: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/306,111DATE: 05/18/1999  
TIME: 10:07:10

Input Set: I306111.RAW

95 aaattacctt ttggtttaca aatctatgtt caacttatttc cattaaatag atacattaaa 2220  
 96 aaaattaaaa actgattctt ctgcagagca ctgggttttc ttttataac cccttgaac 2280  
 97 aagtctctca cstgagcctg tctaaacttt cgaggaggagt ttattattga gtctttatct 2340  
 98 gtgacagtat ttggagattt agggatttga tacttaggc tttgaatttt agaatacaaa 2400  
 99 aagagaagca agccagacat ggtggctcac acctgtatcc ccaatactgg gaggccaagg 2460  
 100 tgggagatc gcttgagccc aggagttga gaccgacatg ggcaacatga caagaccca 2520  
 101 tctctgcaaa aagattaaaa agttggccag gcatggtggc acatgcctgc tcccgctcc 2580  
 102 cggggagact gagatggggg gatcccctgg agccctgaag attgaggctg cagtgagcct 2640  
 103 tgattgtgtc actgcactcc agcttgggtg acagagaccc tgtctcgaga aattaaaaaa 2700  
 104 aaaaaaaaaa 2709  
 105 <210> SEQ ID NO 4  
 106 <211> LENGTH: 570  
 107 <212> TYPE: PRT  
 108 <213> ORGANISM: Homo sapiens  
 109 <400> SEQUENCE: 4  
 110 Met Gly Phe Leu Gln Leu Leu Val Val Ala Val Leu Ala Ser Glu His  
 111 1 5 10 15  
 112 Arg Val Ala Gly Ala Ala Glu Val Phe Gly Asn Ser Ser Glu Gly Leu  
 113 20 25 30  
 114 Ile Glu Phe Ser Val Gly Lys Phe Arg Tyr Phe Glu Leu Asn Arg Pro  
 115 35 40 45  
 116 Phe Pro Glu Glu Ala Ile Leu His Asp Ile Ser Ser Asn Val Thr Phe  
 117 50 55 60  
 118 Leu Ile Phe Gln Ile His Ser Gln Tyr Gln Asn Thr Thr Val Ser Phe  
 119 65 70 75 80  
 120 Ser Pro Thr Leu Leu Ser Asn Ser Ser Glu Thr Gly Thr Ala Ser Gly  
 121 85 90 95  
 122 Leu Val Phe Ile Leu Arg Pro Glu Gln Ser Thr Cys Thr Trp Tyr Leu  
 123 100 105 110  
 124 Gly Thr Ser Gly Ile Gln Pro Val Gln Asn Met Ala Ile Leu Leu Ser  
 125 115 120 125  
 126 Tyr Ser Glu Arg Asp Pro Val Pro Gly Gly Cys Asn Leu Glu Phe Asp  
 127 130 135 140  
 128 Leu Asp Ile Asp Pro Asn Ile Tyr Leu Glu Tyr Asn Phe Phe Glu Thr  
 129 145 150 155 160  
 130 Thr Ile Lys Phe Ala Pro Ala Asn Leu Gly Tyr Ala Arg Gly Val Asp  
 131 165 170 175  
 132 Pro Pro Pro Cys Asp Ala Gly Thr Asp Gln Asp Ser Arg Trp Arg Leu  
 133 180 185 190  
 134 Gln Tyr Asp Val Tyr Gln Tyr Phe Leu Pro Glu Asn Asp Leu Thr Glu  
 135 195 200 205  
 136 Glu Met Leu Leu Lys His Leu Gln Arg Met Val Ser Val Pro Gln Val  
 137 210 215 220  
 138 Lys Ala Ser Ala Leu Lys Val Val Thr Leu Thr Ala Asn Asp Lys Thr  
 139 225 230 235 240  
 140 Ser Val Ser Phe Ser Ser Leu Pro Gly Gln Gly Val Ile Tyr Asn Val  
 141 245 250 255  
 142 Ile Val Trp Asp Pro Phe Leu Asn Thr Ser Ala Ala Tyr Ile Pro Ala  
 143 260 265 270  
 144 His Thr Tyr Ala Cys Ser Phe Glu Ala Gly Glu Ser Cys Ala Ser

PAGE: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/306,111DATE: 05/18/1999  
TIME: 10:07:10

Input Set: I306111.RAW

145	275	280	285													
146	Leu	Gly	Arg	Val	Ser	Ser	Lys	Val	Phe	Phe	Thr	Leu	Phe	Ala	Leu	Leu
147	290	295	300													
148	Gly	Phe	Phe	Ile	Cys	Phe	Phe	Gly	His	Arg	Phe	Trp	Lys	Thr	Glu	Leu
149	305	310	315	320												
150	Phe	Phe	Ile	Gly	Phe	Ile	Ile	Met	Gly	Phe	Phe	Tyr	Ile	Leu	Ile	
151	325	330	335													
152	Thr	Arg	Leu	Thr	Pro	Ile	Lys	Tyr	Asp	Val	Asn	Leu	Ile	Leu	Thr	Ala
153	340	345	350													
154	Val	Thr	Gly	Ser	Val	Gly	Gly	Met	Phe	Leu	Val	Ala	Val	Trp	Trp	Arg
155	355	360	365													
156	Phe	Gly	Ile	Leu	Ser	Ile	Cys	Met	Leu	Cys	Val	Gly	Leu	Val	Leu	Gly
157	370	375	380													
158	Phe	Leu	Ile	Ser	Ser	Val	Thr	Phe	Phe	Thr	Pro	Leu	Gly	Asn	Leu	Lys
159	385	390	395	400												
160	Ile	Phe	His	Asp	Asp	Gly	Val	Phe	Trp	Val	Thr	Phe	Ser	Cys	Ile	Ala
161	405	410	415													
162	Ile	Leu	Ile	Pro	Val	Val	Phe	Met	Gly	Cys	Leu	Arg	Ile	Leu	Asn	Ile
163	420	425	430													
164	Leu	Thr	Cys	Gly	Val	Ile	Gly	Ser	Tyr	Ser	Val	Val	Leu	Ala	Ile	Asp
165	435	440	445													
166	Ser	Tyr	Trp	Ser	Thr	Ser	Leu	Ser	Tyr	Ile	Thr	Leu	Asn	Val	Leu	Lys
167	450	455	460													
168	Arg	Ala	Leu	Asn	Lys	Asp	Phe	His	Arg	Ala	Phe	Thr	Asn	Val	Pro	Phe
169	465	470	475	480												
170	Gln	Thr	Asn	Asp	Phe	Ile	Ile	Leu	Ala	Val	Trp	Gly	Met	Leu	Ala	Val
171	485	490	495													
172	Ser	Gly	Ile	Thr	Leu	Gln	Ile	Arg	Arg	Glu	Arg	Gly	Arg	Pro	Phe	Phe
173	500	505	510													
174	Pro	Pro	His	Pro	Tyr	Lys	Leu	Trp	Lys	Gln	Glu	Arg	Glu	Arg	Arg	Val
175	515	520	525													
176	Thr	Asn	Ile	Leu	Asp	Pro	Ser	Tyr	His	Ile	Pro	Pro	Leu	Arg	Glu	Arg
177	530	535	540													
178	Leu	Tyr	Gly	Arg	Leu	Thr	Gln	Ile	Lys	Gly	Leu	Phe	Gln	Lys	Glu	Gln
179	545	550	555	560												
180	Pro	Ala	Gly	Glu	Arg	Thr	Pro	Leu	Leu							
181	565	570														
182	<210> SEQ ID NO 5															
183	<211> LENGTH: 3063															
184	<212> TYPE: DNA															
185	<213> ORGANISM: Homo sapiens															
186	<400> SEQUENCE: 5															
187	cgaggcgcgg	gtgggtccgg	tggcggcggc	gggggagcgc	gggacaggag	gcttcgggga	60									
188	agatggaccc	ggcccccctcg	ctgggctgca	gcctcaagga	tgtgaagtgg	agctcggtgg	120									
189	ccgtgccgct	cgacccctctg	gtcagcactt	accggctgccc	ccagatcgccg	cgcctggaca	180									
190	acggagagtg	cgtagaaggg	ctgcggaaaa	atgactatct	gctgattcat	tcctgcccgg	240									
191	agtggaccac	catcaactgcc	cacagcttgg	aggagggtca	ctatgtcatt	ggcccaaaga	300									
192	tagagattcc	ggtacattat	gcagggcaat	tcaagctgct	ggaacaagac	cgagatataa	360									
193	aggagccaaat	gcaatatttc	aacagtgtgg	aggagggtggc	taaggcattt	cctgaacgcg	420									
194	tgtacgtcat	ggaggatatac	acattcaacg	tgaaggttgc	ttcaggtgaa	tgcaatgaag	480									

PAGE: 5

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/306,111DATE: 05/18/1999  
TIME: 10:07:10

Input Set: I306111.RAW

195 acactgaagt ttacaacatc accctgtgta ctggggatga actcaacta atggggcag 540  
 196 gcagaaatcc ttcatgcaa gacattcaag gaaaagtac gactcaacac aatcttcaa 600  
 197 aagattggg a gctcaattc catcagcaag ctggggaaag gcaaaatgcc gtgcctcatt 660  
 198 tgtatgaatc accggaccaa c gaaagcatt agccttccat tccagtgca gggcagatt 720  
 199 agcaccggaa agtcccctgg aacttcagat gcaaaaggc gaacacacca tccgccacat 780  
 200 tgtggagaaa accaggcttc ctgtaatgt gactgtgcc agccctccac cgagaaaccc 840  
 201 atacgaccc cacttcatcc gtgaggggca c c gctataag tttgtgaaca tccagaccaa 900  
 202 gacgggttg gtttgcgtg tgctgccc caacaagatc ctcccatgc actttccctt 960  
 203 gcacttgact gtcccaagt tcagccccc agaacacctg gtgaaggag agagctggcc 1020  
 204 c gaaaccctg gtccatcaact g gcttaggtat ctgccaagaa c agttcgaca tcgatgagta 1080  
 205 ttcacggct gtccgtatg tgaaaaccga ctggatgaa gaatgcaaga gccccaaagaa 1140  
 206 gggtcggc tctggccaca accacgtgcc caattcgctc agctacgccc gcatgagct 1200  
 207 caccagtc ttccaccgac tctcggtctg tgttatggc aacaatctcc atggcaacag 1260  
 208 tgaggtaac cttcatggtt gcaggaccc ggggggagat tgggctccct ttcctcatga 1320  
 209 catcctgccc tatcaggact ctggagatag tgggagcgc tacctttcc cagaagctag 1380  
 210 tgaagaatca gcaggcatcc cgggaaagtc agaacttccc tacgaagagc tggctgg 1440  
 211 ggaaggcaag cccagccatc agcctctcac tcgctctctg agcgagaaga acagatgtga 1500  
 212 tcagtttgc ggttctgtcc gatccaaatg tgcaacttct cctcttccca tccctggac 1560  
 213 tctggagca gcagtgaagt cttcagatac tgccctaccc ccacccctcag tgcctccca 1620  
 214 atctgaagcc gtcagagaag aatgccggct cctgaacgccc ccacctgttc caccggaaag 1680  
 215 c gcaaaggct ttgtccacca gtcctccat ccctcctcgc acagtcacg cagcggc 1740  
 216 acagactcgc tctccagcc ccaccttgc ctactattct tcaggctac acaacatctg 1800  
 217 cactaaaact gacacaaatc cttctgaaag cactcctgtt tcctgctatc catgtaaacc 1860  
 218 agtggaaact gattctgtgg acctgaaatc cccgtttggaa agtccttctg ctgaagctgt 1920  
 219 gtcctctcg ctctcatggc ctaaccatta ttcaaggagca tcagaaaagcc agaccaggag 1980  
 220 tgacttctg ctggatccaa gcaggagtt tagttaccct agacaaaaga cggccaggc 2040  
 221 accaaagaga aactgcccag cacctttga ttttgcgtt ttttgcgttcc tggccagccc 2100  
 222 cactagccca gtcactgcag aattcagtag cagcgtctc gtttgcgttcc agtcagcc 2160  
 223 ctactctctg gagagcacag atgtgaaatc ttttgcgttcc gtttgcgttcc agcagagttac 2220  
 224 gtcatgccct gccttacccc ccaggctcc aaaacttagt gaaagagaagg tggccctccg 2280  
 225 aacatctctt ttgcctctga aaattgtatgg tgctgaggaa gacccaaatg ctgggtcacc 2340  
 226 agatctctcg gaggaccatg attttgcgttcc aaaggccatg caggacatct tctctgcctc 2400  
 227 ctacccttc tcatctccgc tccatctcca gctggccccc agatctgtg ggcacggc 2460  
 228 cccatggcag ccacctgctg acctatcagg actctctata gaggaagtgt ccaagtcact 2520  
 229 acggttcatt gtttgcgttcc aagatgtcat atcattttt gttactgaaa agattgtatgg 2580  
 230 gaaacctgc ttttgcgttcc aatggatccaa ctttgcgttcc gtttgcgttcc agtgc 2640  
 231 gcaaggtaag aagataatgc aattcattaa tggctggagg cccaaaatat agccaaataa 2700  
 232 ccccccggcca gcatggaca a aactgatca atgcgtgtgc tagaagggtt gggctggac 2760  
 233 acaatttcat gttttgcac taaaaacctt ctctgttaat agggataaga gaaactctta 2820  
 234 ctatgcagat tacgttttg aatggatccaa ctttgcgttcc gtttgcgttcc agtgc 2880  
 235 tacagaacac ttggaggtgt gccttgcgttcc tcaactcaaca aacactcagc agtgc 2940  
 236 agaaaaaaag gcatgtgcag agaaatcattt ctttgcgttcc gtttgcgttcc agtgc 3000  
 237 tgatatttat tacaatatac ctttgcgttcc gtttgcgttcc agtgc 3060  
 238 aaa 3063  
 239 <210> SEQ ID NO 6  
 240 <211> LENGTH: 647  
 241 <212> TYPE: PRT  
 242 <213> ORGANISM: Homo sapiens  
 243 <400> SEQUENCE: 6  
 244 Met Gln Lys Gly Glu His Thr Ile Arg His Ile Val Glu Lys Thr Arg

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I306111.RAW

## Line ? Error/Warning

## Original Text

931 W "N" or "Xaa" used: Feature required  
 1565 W "N" or "Xaa" used: Feature required  
 1573 W "N" or "Xaa" used: Feature required  
 1726 W "N" or "Xaa" used: Feature required  
 1760 W "N" or "Xaa" used: Feature required  
 1993 W "N" or "Xaa" used: Feature required  
 5002 W "N" or "Xaa" used: Feature required  
 5014 W "N" or "Xaa" used: Feature required  
 5026 W "N" or "Xaa" used: Feature required  
 5038 W "N" or "Xaa" used: Feature required  
 5050 W "N" or "Xaa" used: Feature required  
 5062 W "N" or "Xaa" used: Feature required  
 5074 W "N" or "Xaa" used: Feature required  
 5086 W "N" or "Xaa" used: Feature required  
 5098 W "N" or "Xaa" used: Feature required  
 5110 W "N" or "Xaa" used: Feature required  
 5122 W "N" or "Xaa" used: Feature required  
 5134 W "N" or "Xaa" used: Feature required  
 5146 W "N" or "Xaa" used: Feature required  
 5158 W "N" or "Xaa" used: Feature required  
 5170 W "N" or "Xaa" used: Feature required  
 5182 W "N" or "Xaa" used: Feature required  
 5194 W "N" or "Xaa" used: Feature required  
 5206 W "N" or "Xaa" used: Feature required  
 5218 W "N" or "Xaa" used: Feature required  
 5230 W "N" or "Xaa" used: Feature required  
 5242 W "N" or "Xaa" used: Feature required  
 5254 W "N" or "Xaa" used: Feature required  
 5266 W "N" or "Xaa" used: Feature required  
 5278 W "N" or "Xaa" used: Feature required  
 5290 W "N" or "Xaa" used: Feature required  
 5302 W "N" or "Xaa" used: Feature required  
 5314 W "N" or "Xaa" used: Feature required  
 5326 W "N" or "Xaa" used: Feature required  
 5338 W "N" or "Xaa" used: Feature required  
 5350 W "N" or "Xaa" used: Feature required  
 5362 W "N" or "Xaa" used: Feature required  
 5374 W "N" or "Xaa" used: Feature required  
 5386 W "N" or "Xaa" used: Feature required  
 5398 W "N" or "Xaa" used: Feature required  
 5410 W "N" or "Xaa" used: Feature required  
 5422 W "N" or "Xaa" used: Feature required  
 5434 W "N" or "Xaa" used: Feature required  
 5446 W "N" or "Xaa" used: Feature required  
 5458 W "N" or "Xaa" used: Feature required  
 5470 W "N" or "Xaa" used: Feature required  
 5490 W "N" or "Xaa" used: Feature required  
 5502 W "N" or "Xaa" used: Feature required  
 5514 W "N" or "Xaa" used: Feature required  
 5526 W "N" or "Xaa" used: Feature required

Leu Arg Lys Gln Gln Ile Leu Leu Xaa L  
 tgctgttctc cangatcctc tttgtcatca tggttctc  
 tgtgtcaat agcattatgt ctaaaaaata tatgcacg  
 ctgcctcattc gataccccat ttagctccag aaagnaaa  
 ggtggtaggg cggggcgggc cacagtctcc accctgaa  
 ttattaataa gttcaagtgg ggaaggtggg agagcagt  
 ancgggagcc tcctgaccat ctcccttcc  
 cncacagaaa attcaataag accctcgct  
 cncagcttctt cgtagggaaag ttctgactt  
 antcctgcac accagccagt aacgccacc  
 gnggctggaa agatgtgtgg ggtatcaaga  
 anatgggtct aagccacaca acagggtga  
 anccggcaggaa aacttacagg gacagagct  
 gngtttccgg tgcgtatgggt gtagaggat  
 cnagaacaca tagggatgcg agagcaagc  
 anactgaaaaa ctgagttatgt gcgagtgtta  
 gntatccatt tccttcttctt catctgagt  
 tncttgaggc aatgggtgaa gtccggcgg  
 tnctctgctg tgccttctc tatccgaac  
 gngcatctca ctggatgtca tcatacatca  
 tnngccatgt gaagggcatg ggcagttg  
 gngcactgta ttgagctgat tgctgaagc  
 cncagaagca gaagaatgac aggcaacac  
 anacattctg agtagttgca tgatttccc  
 gnccagaaaat ttgaggacat gctggcag  
 anggaaacaa gacaactgga gaaggggtca  
 tnngccatgt ggttagacaga gggcttcag  
 anccatctac atgtgcattt acaagctta  
 tnngataga tccttcgta acaccaagt  
 angaccagat ctccaccagc acatcaaac  
 tnnttgggc aagatggctg ttaagcagt  
 tnngttgttc cgggcaggc attcttgtc  
 tnacacgctc tgcgtatgg cttgtgttt  
 cnngatgtgt gatattggag cttgtgttt  
 ancatcaaag gtgcccataat aagttccca  
 anatcaactgc atttgttctg gaaacctgac  
 gntgacttca atctcctcac ctccaccg  
 gnagtgccac ctatgactac caaattctc  
 gnggatgag gcaatgaaca caatgaaag  
 cnnaactggt gtttttaccg tatccttca  
 tnngattctgc cgaatccgaa agtgccttc  
 angttgcattt gctcaacaca gggcagagg  
 anggatgcca tctctcaccc actctgtac  
 anaccaccac ctgcacaggc attccttaa  
 cncctgaggg tagaaggccg ctcaagggtt  
 tnngatgtac agagcaagaa gcaaggagg  
 anctgcccattt ctaaaagagga gccagatga  
 tnngatgtgt gcaacttgcgt agcttccag  
 ctttcgagca ctaagaacgg gacacggta  
 angagaagtt ctgtgcgtgg gtctggcgtcg

Input Set: I306111.RAW

## Line ? Error/Warning

## Original Text

5538 W "N" or "Xaa" used: Feature required  
5550 W "N" or "Xaa" used: Feature required  
5570 W "N" or "Xaa" used: Feature required  
5582 W "N" or "Xaa" used: Feature required  
5594 W "N" or "Xaa" used: Feature required  
5606 W "N" or "Xaa" used: Feature required  
5618 W "N" or "Xaa" used: Feature required  
5630 W "N" or "Xaa" used: Feature required  
5642 W "N" or "Xaa" used: Feature required  
5654 W "N" or "Xaa" used: Feature required  
5666 W "N" or "Xaa" used: Feature required  
5678 W "N" or "Xaa" used: Feature required

angtcgttct gcaccaggcc tctgtacg  
gntcatctcc agcaccatct ccatcaatg  
angttcacat atgataacaag gctcttcc  
cnagtagaca gcacaggttag tcggcttga  
gngaatgcaa tatgaagaaa acaggtcag  
anatcaaggt gattaggctc ttccatgca  
tntacattca atgccttgc ttccatgctg  
antccatgag accaccctaa actgtccat  
gngagaaaaa gtgctctgtg ttgatgtat  
antccacctt ctgccatgat taccagct  
anccaagatg cagaggttga tgaaggcac  
tntaatgcct gaaaagatgt gtgtctcct